PSS Curs 09

Lab 09: 1521ISF

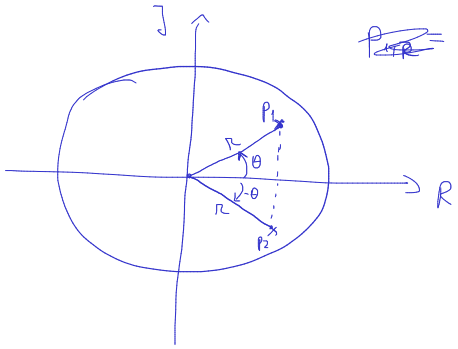
$$\Delta = 2^{-5} = \frac{1}{32}$$

$$P_n = \frac{\Delta^2}{12} = 8.13 \cdot 10^{-5}$$

$$P_T = P_{TSV} = \frac{\Delta^2}{3} = 32.5 \cdot 10^{-5} \approx 3210^{-4}$$

$$\overline{x^2} = V^2 + \mu^2$$

Poli complex-conjugați:



~~$p_{1R} = p_{2R}$~~ =

$$p_1 = r \cdot e^{j\theta}$$
$$p_2 = r \cdot e^{-j\theta}$$

$r = |p_{1,2}|$

$\theta = \angle p_1$

$$(z-p_1)(z-p_2) = (z - re^{j\theta})(z - re^{-j\theta}) =$$
$$= z^2 - z \cdot re^{j\theta} - z \cdot re^{-j\theta} + r^2 \underbrace{e^{j\theta} \cdot e^{-j\theta}}_{1}$$
$$= z^2 - r\underbrace{(e^{j\theta} + e^{-j\theta})}_{2\cos(\theta)} \cdot z + r^2$$
$$= z^2 \underbrace{- 2r\cos\theta}_{a_1} \cdot z + r^2$$
$$= z^2 \left(1 \underbrace{- 2r\cos\theta}_{a_1} z^{-1} + \underbrace{r^2}_{a_2} z^{-2} \right)$$